

Application No.: 10/759,497

Case No.: 59495US002

Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (currently amended) A compound comprising:
 - (a) an elastomeric copolymer having interpolymerized monomeric units derived from vinylidene fluoride monomer, at least one cure site moiety, and substantially no perfluorinated vinyl ether monomers;
 - (b) a peroxide curable component; ~~and~~
 - (c) at least one mineral filler, such that upon vulcanization the resulting compound has a retraction at lower temperature (TR-10) of -20°C or less; and
 - (d) a peroxide.
2. (original) The compound according to claim 1, wherein said copolymer includes terpolymers or quadpolymers.
3. (previously presented) The compound according to claim 1, wherein said copolymer further comprises, tetrafluoroethylene, hexafluoropropylene, chlorotrifluoroethylene, pentafluoropropylene, vinyl fluoride, propylene, ethylene or combinations thereof.
4. (original) The compound according to claim 1, wherein said compound includes a blend of at least two copolymers.
5. (original) The compound according to claim 4, wherein at least two of said copolymers have a difference in fluorine content of at least 3 weight %.
6. (previously presented) The compound according to claim 1, wherein said copolymer further comprises ethylenically unsaturated monomers of the formula $\text{CF}_2=\text{CFR}_f$ where R_f is fluorine or perfluoroalkyl of 1 to 8 carbon atoms.

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7. (previously presented) The compound according to claim 1, wherein said at least one cure site moiety is derived from one or more compounds of the formula: (a) $CX_2=CX(Z)$, wherein: (i) X each is independently H or F; and (ii) Z is Br, I, Cl or R_f2-U wherein $U=Br, I, Cl,$ or CN and R_f2 =a perfluorinated divalent linking group optionally containing O atoms; or (b) $Y(CF_2)_qY$, wherein: (i) Y is Br or I or Cl and (ii) $q=1-6$.

8. (currently amended) The compound according to claim 7, wherein said at least one cure site moiety are derived from $CF_2=CFBr$, $CF_2=CHBr$, $ICF_2CF_2CF_2CF_2I$, CH_2I_2 , $BrCF_2CF_2Br$, $CF_2=CFO(CF_2)_3-OCF_2CF_2Br$, $CF_2=CFOCF_2CF_2Br$, $CH_2=CHCF_2CF_2Br$, $CH_2=CHCF_2CF_2I$, $CF_2=CFCl$ or mixtures thereof.

9. (original) The compound according to claim 7, wherein said compound having the formula $CX_2=CX(Z)$ has an iodine or a bromine or a chlorine chemically bonded to chain ends.

10. (original) The compound according to claim 1, wherein said component (a) is formed by emulsion polymerization.

11. (original) The compound according to claim 1, wherein said at least one mineral filler includes clay, silica, talc, diatomaceous earth, barium sulfate, wollastonite, calcium carbonate, calcium fluoride, titanium oxide, iron oxide, or combinations thereof.

12. (original) The compound according to claim 11, wherein the at least one mineral filler is surface treated.

13. (original) The compound of claim 1, further comprising acid acceptors.

14. (original) The compound according to claim 1, wherein said compound has a solvent volume swell in FUEL H (CE15) of about 60% or less, according to ASTM D471-98 or a tensile strength of about 3.5 MPa or greater according to ASTM D418-02.

15. (currently amended) A compound consisting essentially of:

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- (a) an elastomeric copolymer having two or more interpolymerized monomeric units derived from vinylidene fluoride monomer, tetrafluoroethylene, hexafluoropropylene, chlorotrifluoroethylene, pentafluoropropylene, vinyl fluoride, propylene, or ethylene;
- (b) at least one cure site moiety; ~~and~~
- (c) a peroxide curable component comprising at least one mineral filler, such that upon vulcanization the resulting compound has a retraction at lower temperature (TR-10) of -20°C or less; and
- (d) a peroxide.

16. (original) A method of forming an elastomer, comprising vulcanizing the compound of claim 1.

17. (original) An article comprising a cured compound according to claim 1.

18. (currently amended) A method of forming a compound comprising, polymerizing an elastomeric copolymer having interpolymerized monomeric units derived from vinylidene fluoride monomer, at least one cure site moiety, and substantially no perfluorinated vinyl ether monomers, a peroxide curable component, a peroxide, and at least one mineral filler.